UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 10-Q

ark	

(Mark One)				
☑ QUARTERL	Y REPORT PURSUANT TO SECTION 13 OR 15((d) OF THE SECURITIES EXCHANG	E ACT OF 1934	
	For the q	uarterly period ended September 30, 20	21;	
		or		
☐ TRANSITIO	N REPORT PURSUANT TO SECTION 13 OR 15	(d) OF THE SECURITIES EXCHANG	E ACT OF 1934	
	For the	e transition period from t	0	
	C	ommission file number 001-38161		
		calyxt		
		Calyxt, Inc.		
	(Exact nan	ne of registrant as specified in its ch	arter)	
	Delaware		27-1967997	
	(State or other jurisdiction of		(I.R.S. Employer	
	incorporation or organization)		Identification No.)	
	2800 Mount Ridge Road			
	Roseville, MN		55113-1127	
	(Address of principal executive offices)		(Zip Code)	
	(Registr	(651) 683-2807 rant's telephone number, including area code)	
	(Former name, former	N/A address and former fiscal year, if changed s	ince last report)	
Securities registered	pursuant to Section 12(b) of the Act.	address and former risear year, it changed s	ince has report)	
	Title of each class	Trading Symbol(s)	Name of each exchange on which registered	
	Common Stock (0.0001 par value)	CLXT	The NASDAQ Global Market	
	ark whether the registrant (1) has filed all reports required that the registrant was required to file such reports), and (2)	. ,	ecurities Exchange Act of 1934 during the preceding 12 months is for the past 90 days. Yes \square No \square	(or fo
	ark whether the registrant has submitted electronically eve 12 months (or for such shorter period that the registrant w	•	itted pursuant to Rule 405 of Regulation S-T (§232.405 of this c \Box	hapter
	nark whether the registrant is a large accelerated filer, an accelerated filer," "accelerated filer," "smaller reporting co		smaller reporting company or an emerging growth company. In Rule 12b-2 of the Exchange Act:	See th
Large accelerated	filer \square		Accelerated filer	
Non-accelerated fi	iler ☑		Smaller reporting company	
			Emerging growth company	√
	th company, indicate by check mark if the registrant has el ursuant to Section 13(a) of the Exchange Act. □	ected not to use the extended transition perio	d for complying with any new or revised financial accounting	

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). \square Yes \square No

As of November 4, 2021, there were 38,505,678 shares of common stock, \$0.0001 par value per share, outstanding.

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Terms

When the terms the "Company" or "its" are used in this report, unless the context otherwise requires, those terms are being used to refer to Calyxt, Inc. When the term "Cellectis," is used, it is being used to refer to Cellectis S.A., the Company's majority stockholder. Cellectis is a clinical-stage biotechnology company employing its core proprietary technologies to develop best-in-class products in the field of immuno-oncology.

The Company owns the names PlantSpring and BioFactory. The Company also owns the trademarks Calyxt® and Calyno® and owns or licenses other trademarks, trade names, and service marks appearing in this Quarterly Report on Form 10-Q. The names and trademarks "Cellectis®" and "TALEN®," along with any other trademarks, trade names, and service marks of Cellectis appearing in the Company's Annual Report on Form 10-K are the property of Cellectis. This Quarterly Report on Form 10-Q also contains additional trade names, trademarks, and service marks belonging to other companies. The Company does not intend its use or display of other parties' trademarks, trade names, or service marks to imply, and such use or display should not be construed to imply, a relationship with, or endorsement or sponsorship of these other parties.

Cautionary Note Regarding Forward-Looking Statements

This Quarterly Report on Form 10-Q contains "forward-looking statements" within the meaning of the federal securities laws, including Section 27A of the Securities Act of 1933, as amended (the Securities Act), and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act). The Company may also make forward-looking statements in other reports filed with the Securities and Exchange Commission (SEC), in materials delivered to stockholders and in press releases. In addition, the Company's representatives may from time-to-time make oral forward-looking statements.

The Company has made these forward-looking statements in reliance on the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. In some cases, you can identify these statements by forward-looking words such as "anticipates," "believes," "continue," "estimates," "expects," "intends," "may," "might," "plans," "predicts," "projects," "should," "targets," "will," or the negative of these terms and other similar terminology. Forward-looking statements in this report include statements about the potential impact of the COVID-19 pandemic on its business and operating results; the Company's future financial performance, including its cash runway; its product pipeline and development; the Company's business model and strategies for the development, commercialization and sales of commercial products; commercial demand for its synthetic biology solutions; the development and deployment of its PlantSpring technology platform; its ability to deploy and leverage its artificial intelligence and machine learning (AIML) capabilities; the ability to scale production capability for its BioFactory production system; potential development agreements, partnerships, customer relationships, and licensing arrangements and their contribution to the Company's financial results, cash usage, and growth strategies; and anticipated trends in its business. These and other forward-looking statements are predictions and projections about future events and trends based on the Company's current expectations, objectives, and intentions and are premised on current assumptions. The Company's actual results, level of activity, performance, or achievements could be materially different than those expressed, implied, or anticipated by forward-looking statements due to a variety of factors, including, but not limited to: the severity and duration of the evolving COVID-19 pandemic and the resulting impact on macro-economic conditions; the impact of increased competition, including competition from a broader array of synthetic biology companies; disruptions at its key facilities, including disruptions impacting its BioFactory production system; flaws in AIML algorithms, insufficiency of data inputs required by such algorithms, and human error in interacting with AIML; changes in customer preferences and market acceptance of its products; changes in market consensus as to what attributes are required for a product to be considered "sustainable"; competition for customers, partners, and licensees and the successful execution of development and licensing agreements; the impact of adverse events during development, including unsuccessful pilot production of plant-based chemistries or field trials; the impact of improper handling of its product candidates during development; failures by third-party contractors; inaccurate demand forecasting or milestone and royalty payment projections; the effectiveness of commercialization efforts by commercial partners or licensees; disruptions to supply chains, including raw material inputs for its BioFactory; the impact of changes or increases in oversight and regulation; disputes or challenges regarding intellectual property; proliferation and continuous evolution of new technologies; management changes; dislocations in the capital markets; and other important factors discussed under the heading "Risk Factors" in the Company's filings with the Securities and Exchange Commission, included in Part I, Item 1A of its Annual Report on Form 10-K for the year ended December 31, 2020, which was filed with the SEC on March 4, 2021 (the Annual Report), this report, and the Company's subsequent reports on Forms 10-Q and 8-K filed with the SEC.

Any forward-looking statements made by the Company in this Quarterly Report on Form 10-Q are based only on currently available information and speak only as of the date of this report. Except as otherwise required by securities and other applicable laws, the Company does not assume any obligation to publicly provide revisions or updates to any forward-looking statements, whether as a result of new information, future developments or otherwise, should circumstances change.

Market Data

Unless otherwise indicated, information contained in this Quarterly Report concerning the Company's industry and the markets in which it operates is based on information from various sources, including independent industry publications. In presenting this information, the Company has also made assumptions based on such data and other similar sources, and on its knowledge of, and its experience to date in, the potential markets for its product. The industry in which the Company operates is subject to a high degree of uncertainty and risk due to a variety of factors, including those described in the section entitled "Risk Factors" in its Annual Report and other subsequent reports on Forms 10-Q and 8-K filed with the SEC. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by the Company.

Website Disclosure

The Company uses its website (www.calyxt.com), its corporate Twitter account (@Calyxt_Inc) and its corporate LinkedIn account (https://www.linkedin.com/company/calyxt-inc) as routine channels of distribution of company information, including press releases, analyst presentations, and supplemental financial information, as a means of disclosing material non-public information and for complying with its disclosure obligations under Regulation FD. Accordingly, investors should monitor the Company's website and its corporate Twitter and LinkedIn accounts in addition to following press releases, filings with the SEC, and public conference calls and webcasts.

Additionally, the Company provides notifications of announcements as part of its website. Investors and others can receive notifications of new press releases posted on the Company's website by signing up for email alerts.

None of the information provided on the Company's website, in its press releases or public conference calls and webcasts, or through social media is incorporated into, or deemed to be a part of, this Quarterly Report or in any other report or document it files with the SEC, and any references to its website or to its corporate Twitter and LinkedIn accounts are intended to be inactive textual references only.

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

CALYXT, INC. CONSOLIDATED BALANCE SHEETS (In Thousands, Except Par Value and Share Amounts)

	eptember 30, 2021 unaudited)	December 31, 2020
Assets		
Current assets:		
Cash and cash equivalents	\$ 13,922	\$ 17,299
Short-term investments	_	11,698
Restricted cash	393	393
Accounts receivable	206	4,887
Inventory	1,674	1,383
Prepaid expenses and other current assets	1,057	3,930
Total current assets	17,252	39,590
Non-current restricted cash	598	597
Land, buildings, and equipment	21,476	22,860
Other non-current assets	195	280
Total assets	\$ 39,521	\$ 63,327
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	\$ 1,037	\$ 929
Accrued expenses	1,139	2,891
Accrued compensation	2,284	1,950
Due to related parties	149	766
Current portion of financing lease obligations	387	364
Other current liabilities	147	45
Total current liabilities	5,143	6,945
Financing lease obligations	17,582	17,876
Long-term debt	_	1,518
Other non-current liabilities	971	113
Total liabilities	23,696	26,452
Stockholders' equity:		
Common stock, \$0.0001 par value; 275,000,000 shares authorized; 37,401,876 shares issued and 37,301,724 shares outstanding as of September 30, 2021, and 37,165,196 shares issued and		
37,065,044 shares outstanding as of December 31, 2020	205 000	204.007
Additional paid-in capital	205,899	204,807
Common stock in treasury, at cost; 100,152 shares as of September 30, 2021, and December 31, 2020	(1,043)	(1,043)
Accumulated deficit	(189,035)	(166,893)
Total stockholders' equity	15,825	 36,875
Total liabilities and stockholders' equity	\$ 39,521	\$ 63,327

See accompanying notes to these consolidated financial statements.

CALYXT, INC. CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited and in Thousands Except Shares and Per Share Amounts)

	Th	ree Months End	led S	eptember 30,	Nine Months Ended September 3						
	<u> </u>	2021		2020	2021	2020					
Revenue	\$	7,762	\$	5,241 \$	24,044 \$	9,925					
Cost of goods sold		8,281		7,060	26,553	16,265					
Gross profit		(519)		(1,819)	(2,509)	(6,340)					
Operating expenses:											
Research and development		2,579		2,204	8,473	7,816					
Selling, general, and administrative		3,859		4,523	11,595	15,988					
Management fees		_		68	45	172					
Restructuring costs		_		436	_	436					
Total operating expenses		6,438		7,231	20,113	24,412					
Loss from operations		(6,957)		(9,050)	(22,622)	(30,752)					
Gain upon extinguishment of Payroll Protection Program loan		_		_	1,528	_					
Interest, net		(356)		(324)	(1,059)	(568)					
Non-operating expenses		6		(102)	11	(121)					
Loss before income taxes		(7,307)		(9,476)	(22,142)	(31,441)					
Income taxes		_		_	_	_					
Net loss	\$	(7,307)	\$	(9,476) \$	(22,142) \$	(31,441)					
Basic and diluted net loss per share	\$	(0.20)	\$	(0.29) \$	(0.60) \$	(0.95)					
Weighted average shares outstanding - basic and diluted		37,279,703		33,200,289	37,205,655	33,076,376					
Anti-dilutive stock options, restricted stock units, and											
performance stock units		5,966,488		5,581,307	5,966,488	5,581,307					

See accompanying notes to these consolidated financial statements.

CALYXT, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(Unaudited and in Thousands Except Shares Outstanding)

							Accumulated		
			Additional	Shares			Other		Total
	Shares	Common	Paid-In	in	Accumulated	(Comprehensive	S	Stockholders'
Three Months September 30, 2021	Outstanding	Stock	Capital	Treasury	Deficit		Income (Loss)		Equity
Balance as of June 30, 2021	37,205,473	\$ 4	\$ 204,663	\$ (1,043)	\$ (181,728)	\$	_	\$	21,896
Net loss	_	_	_	_	(7,307)		_		(7,307)
Stock-based compensation	_	_	1,236	_	_		_		1,236
Issuance of common stock	96,251	_	_	_	_		_		<u> </u>
Balance at September 30, 2021	37,301,724	\$ 4	\$ 205,899	\$ (1,043)	\$ (189,035)	\$	_	\$	15,825

Three Months September 30, 2020	Shares Outstanding	Common Stock	Additional Paid-In Capital	Shares in Treasury	A	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
Balance as of June 30, 2020	33,040,520	\$ 3	\$ 188,656	\$ (1,043)	\$	(144,022)	\$ (41)	\$ 43,553
Net loss	_	_	_	_		(9,476)	_	(9,476)
Stock-based compensation	_	_	570	_		_	_	570
Issuance of common stock	202,641	_	211	_		_	_	211
Other comprehensive income	_	_	_	_		_	38	38
Balance at September 30, 2020	33,243,161	\$ 3	\$ 189,437	\$ (1,043)	\$	(153,498)	\$ (3)	\$ 34,896

							Accumulated		
			Additional	Shares			Other		Total
	Shares	Common	Paid-In	in	Accumulated	(Comprehensive	S	tockholders'
Nine Months Ended September 30, 2021	Outstanding	Stock	Capital	Treasury	Deficit		Income (Loss)		Equity
Balance as of December 31, 2020	37,065,044	\$ 4	\$ 204,807	\$ (1,043)	\$ (166,893)	\$	_	\$	36,875
Net loss	_	_	_	_	(22,142)		_		(22,142)
Stock-based compensation	_	_	865	_	_		_		865
Issuance of common stock	236,680	_	227	_	_		_		227
Balance at September 30, 2021	37,301,724	\$ 4	\$ 205,899	\$ (1,043)	\$ (189,035)	\$	_	\$	15,825

Nine Months Ended September 30, 2020	Shares Outstanding	Common Stock	Additional Paid-In Capital	Shares in Treasury	Accumulated Deficit	Co	ccumulated Other mprehensive come (Loss)	Total Stockholders' Equity
Balance as of December 31, 2019	32,951,329	\$ 3	\$ 185,588	\$ (1,043)	\$ (122,057)	\$	17	\$ 62,508
Net loss	_	_	_	_	(31,441)		_	(31,441)
Stock-based compensation	_	_	3,638	_	_		_	3,638
Issuance of common stock	309,624	_	211	_	_		_	211
Shares withheld for net share settlement	(17,792)	_	_	_	_		_	_
Other comprehensive loss	_	_	_	_	_		(20)	(20)
Balance at September 30, 2020	33,243,161	\$ 3	\$ 189,437	\$ (1,043)	\$ (153,498)	\$	(3)	\$ 34,896

See accompanying notes to these consolidated financial statements.

CALYXT, INC. CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited and in Thousands)

Nine Months Ended September 30, 2021 2020 **Operating activities** Net loss \$ (22,142) (31,441)Adjustments to reconcile net loss to net cash used by operating activities: Gain upon extinguishment of Payroll Protection Program loan (1,528)Depreciation and amortization 1,776 1,372 Stock-based compensation 865 3,638 Changes in operating assets and liabilities: 4,681 Accounts receivable (1,310)Due to/from related parties (617)(498)(291) Inventory (3,359)Prepaid expenses and other current assets 2,873 (707)Accounts payable 108 86 (1,742) Accrued expenses 1,717 Accrued compensation 334 (572)Other 1,029 183 Net cash used by operating activities (14,654)(30,891)**Investing activities** Sales and (purchases) of short-term investments, net 11,698 (20,802) Purchases of land, buildings, and equipment (376)(1,253)Net cash provided (used) by investing activities 11,322 (22,055)Financing activities Proceeds from Payroll Protection Program loan 1,518 Repayments of financing lease obligations (271)(217)Proceeds from the exercise of stock options 227 211 Net cash (used) provided by financing activities (44) 1,512 Net decrease in cash, cash equivalents, and restricted cash (3,376)(51,434)Cash, cash equivalents, and restricted cash - beginning of period 18,289 60,038 Cash, cash equivalents, and restricted cash – end of period \$ 14,913 8,604 \$

See accompanying notes to these consolidated financial statements.

CALYXT, INC. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)

1. BASIS OF PRESENTATION & SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The unaudited consolidated financial statements of Calyxt, Inc. (Calyxt or the Company) have been prepared in accordance with accounting principles generally accepted in the United States (U.S. GAAP or GAAP) for interim financial information and with the rules and regulations of the Securities and Exchange Commission (SEC) applicable to interim financial statements. In the Company's opinion, the accompanying consolidated financial statements reflect all adjustments necessary for a fair presentation of its statements of financial position, results of operations, and cash flows for the periods presented but they do not include all the information and footnotes required by U.S. GAAP for complete financial statements. Except as otherwise disclosed herein, these adjustments consist of normal recurring items. Operating results for interim periods are not necessarily indicative of results that may be expected for the fiscal year as a whole or any other interim period.

The preparation of the consolidated financial statements in conformity with U.S. GAAP requires the Company to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, expenses, and the related disclosures at the date of the consolidated financial statements and during the reporting period. Actual results could materially differ from these estimates.

Certain prior year amounts have been reclassified to conform to the current year presentation.

For further information, refer to the audited consolidated financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2020, filed with the SEC on March 4, 2021. The accompanying Balance Sheet as of December 31, 2020, was derived from the audited consolidated financial statements. This Quarterly Report on Form 10-Q should be read in conjunction with the Company's consolidated financial statements and notes included in the Annual Report on Form 10-K for the year ended December 31, 2020.

Risks and Uncertainties

Calyxt is an early-stage company and has incurred net losses since its inception. As of September 30, 2021, the Company had an accumulated deficit of \$189.0 million. The Company's net losses were \$22.1 million for the nine months ended September 30, 2021, and the Company used \$14.7 million of cash for operating activities for the nine months ended September 30, 2021. The Company's primary sources of liquidity are its cash and cash equivalents.

As of September 30, 2021, the Company had \$14.9 million of cash, cash equivalents, and restricted cash. The Company's restricted cash is associated with its equipment financing leases and was \$1.0 million as of September 30, 2021, with \$0.4 million scheduled to be returned in December 2021. Current liabilities were \$5.1 million as of September 30, 2021.

On September 21, 2021, the Company entered into an Open Market Sale AgreementSM (the ATM Facility) with Jefferies LLC (Jefferies), acting as sole selling agent. Under the terms of the ATM Facility, the Company may, from time-to-time, issue common stock having an aggregate offering value of up to \$50.0 million. At its discretion the Company determines the timing and number of shares to be issued under the ATM Facility. As of the date of this report, the Company has issued approximately 1.2 million shares of common stock under the ATM Facility for proceeds of \$3.7 million net of commissions and payments for other share issuance costs.

The Company's current operating plans reflect a modest level of payments from customers from commercial activities in 2022, which when combined with planned spending and the current balance of cash and cash equivalents make it likely that it will require additional liquidity to continue operations under this business plan over the next 12 months. Absent payments from customers in excess of Calyxt's operating plans or the ability to raise capital, the Company's management believes it can implement various cost reduction and other cash-focused measures in order to manage liquidity for the next 12 months.

The Company anticipates that it will continue to generate losses for the next several years before revenue is enough to support its operating capital requirements. Until the Company can generate substantial cash flow, it expects to finance a portion of future cash needs through cash on hand, commercialization activities, which may result in various types of revenue streams from (i) product sales from its proprietary BioFactory production system, and (ii) future product development agreements and technology licenses, including upfront and milestone payments, annual license fees, and royalties; government or other third-party funding, public or private equity or debt financings, or the issuance of shares under the Company's ATM Facility. However, additional capital may not be available on reasonable terms, if at all. If the Company is unable to raise additional capital in a sufficient amount or on acceptable terms, it may have to

significantly delay, scale back, or discontinue the development or commercialization of its activities. Failure to receive additional funding could cause the Company to cease operations, in part or in full. If the Company raises additional funds through the issuance of additional debt or equity securities, it could result in dilution to its existing stockholders and increased fixed payment obligations, and these securities may have rights senior to those of the Company's shares of common stock. Any of these events could significantly harm the Company's business, financial condition, and prospects.

Net Loss Per Share

Due to the Company's net loss position for the three and nine months ended September 30, 2021, and September 30, 2020, all its outstanding stock options, restricted stock units, and performance stock units are considered anti-dilutive and excluded from the calculation of net loss per share. Accordingly, the treasury method was not used in determining the number of anti-dilutive stock options and restricted stock units.

2. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE AND CONCENTRATIONS OF CREDIT RISK

Financial Instruments Measured at Fair Value and Financial Statement Presentation

Financial instruments including cash and cash equivalents, restricted cash, accounts receivable, accounts payable, and all other current liabilities have carrying values that approximate fair value. The Company measures short-term investments and commodity derivative contracts at fair value on a recurring basis. The accounting guidance establishes a three-tier hierarchy, which prioritizes the inputs used in the valuation methodologies in measuring fair value as of the measurement date as follows:

- Level 1: Fair values are based on unadjusted quoted prices in active trading markets for identical assets and liabilities.
- Level 2: Fair values are based on observable quoted prices other than those in Level 1, such as quoted prices for similar assets or liabilities in active markets or quoted prices for identical assets or liabilities in inactive markets.
- Level 3: Fair values are based on at least one significant unobservable input for the asset or liability.

Fair Value Measurements and Financial Statement Presentation

As of September 30, 2021, the Company had no financial instruments measured at fair value. The fair values of the Company's financial instruments measured at fair value and their respective levels in the fair value hierarchy as of December 31, 2020, were as follows:

			ember	31, 20	020	December 31, 2020										
			Fair	Values	of As	sets		Fair Values of Liabilities								
In Thousands	I	evel 1	Le	vel 2	Le	vel 3	Total	Leve	l 1	Lev	vel 2	Le	vel 3	To	otal	
Other items reported at fair value:																
Short-term investments	\$	11,698	\$	_	\$	_	\$ 11,698	\$	_	\$	_	\$	_	\$	_	
Commodity derivative contracts		467		_		_	467		_		_		_		_	
Total	\$	12,165	\$	_	\$		\$ 12,165	\$	_	\$	_	\$	_	\$		

The non-current portion of the Company's financing lease obligations are also considered a financial instrument, which it measures at fair value for disclosure purposes on a non-recurring basis. It is a Level 2 liability and had a fair value of \$14.8 million as of September 30, 2021, and a fair value of \$15.2 million as of December 31, 2020.

Commodity Price Risk

Under the Company's former go-to-market strategy for its soybean product line, it entered into seed and grain production agreements with settlement values based on commodity futures market prices (Forward Purchase Contracts). These Forward Purchase Contracts allowed the counterparty to fix their sales prices at various times as defined in the contract. Upon delivery, the inventory was carried at historical cost but sold at prevailing market prices. As a result, the Company entered into hedging arrangements by selling futures contracts which converted its market exposure to these fixed prices to floating prices. The Company would maintain these hedging relationships until such grain inventory was sold to help stabilize margins. The Company did not account for these economic hedges as accounting hedges. The Company expected that any gains or losses from these hedging arrangements would be offset by gains or losses

on the grain inventories when such grain inventories were sold. As a result of the continued wind-down of the soybean product line, the Company held no commodity derivative contracts as of September 30, 2021.

Prior to August 1, 2020, the Company designated all of its commodity derivative contracts as cash flow hedges based on the nature of its business activities. As a result, all gains or losses associated with recording those commodity derivative contracts at fair value were recorded as a component of accumulated other comprehensive income (loss) (AOCI). The Company reclassified amounts from AOCI to cost of goods sold when the underlying products were sold to which those hedges related. For the three and nine months ended September 30, 2020, the Company reclassified a nominal amount from AOCI to cost of goods sold, and there were no such reclassifications in the same periods in 2021.

Foreign Exchange Risk

Foreign currency fluctuations affect the Company's foreign currency cash flows related primarily to payments to Cellectis. The Company's principal foreign currency exposure is to the euro. The Company does not hedge these exposures, and it does not believe that the current level of foreign currency risk is significant to its operations.

Concentrations of Credit Risk

The Company invests its cash, cash equivalents, and restricted cash in highly liquid securities and investment funds. It diversifies the risk posed by exceeding deposit insurance limits by allocating from time-to-time certain investments to a diverse portfolio of short-dated, high investment-grade securities, which the Company classifies as short-term investments that are recorded at fair value in its consolidated financial statements. The Company ensures the credit risk in this portfolio is in accordance with its internal policies and if necessary, makes changes to investments to ensure credit risk is minimized. The Company has not experienced any counterparty credit losses. As of September 30, 2021, the Company did not hold any short-term investments.

3. RELATED-PARTY TRANSACTIONS

The Company is party to several agreements that govern its relationship with Cellectis, some of which require the Company to make payments to Cellectis. Pursuant to the Company's management services agreement with Cellectis, it incurred nominal management fee expenses for the three and nine months ended September 30, 2021, and 2020.

Cellectis has also guaranteed the lease agreement for the Company's headquarters. Cellectis' guarantee of the Company's obligations under the lease will terminate at the end of the second consecutive calendar year in which the Company's tangible net worth exceeds \$300 million.

TALEN® is the Company's primary gene editing technology, and it is the foundation of its technology platform. TALEN® technology was invented by researchers at the University of Minnesota and Iowa State University and exclusively licensed to Cellectis. The Company obtained an exclusive license for the TALEN® technology for commercial use in plants from Cellectis. The Company also licenses other technology from Cellectis. Cellectis is entitled to royalties on any revenue the Company generates from sales of products less certain amounts as defined in the license agreement, royalties on certain cumulative revenue thresholds, and a percentage of any sublicense revenues. The Company has incurred nominal license and royalty fees for the three and nine months ended September 30, 2021, and 2020.

The Company is also party to various agreements with the University of Minnesota, pursuant to which it has been granted both exclusive and non-exclusive license agreements that carry annual license fees, milestone payments, royalties, and associated legal fees. These agreements primarily relate to geneediting tools, enabling technologies, and germplasm. The Company incurred nominal expenses pursuant to these agreements for the three and nine months ended September 30, 2021, and 2020.

4. STOCKHOLDERS' EQUITY

ATM Facility

On September 21, 2021, the Company entered into an ATM Facility with Jefferies, who is acting as sole selling agent for the ATM Facility. Under the terms of the ATM Facility, the Company may, from time-to-time, issue common stock having an aggregate offering value of up to \$50.0 million. At its discretion the Company determines the timing and number of shares to be issued under the ATM Facility.

As of September 30, 2021, the Company had not issued any shares of common stock under the ATM Facility. As of the date of this report, the Company has issued approximately 1.2 million shares of common stock under the ATM Facility for proceeds of \$3.7 million net of commissions and payments for other share issuance costs.

5. STOCK-BASED COMPENSATION

The Company uses broad-based stock plans to attract and retain highly qualified officers and employees and to help ensure that management's interests are aligned with those of its shareholders. The Company has also granted equity-based awards to directors, nonemployees, and certain employees of Cellectis.

In December 2014, the Company adopted the Calyxt, Inc. Equity Incentive Plan (2014 Plan), which allowed for the grant of stock options, and in June 2017, it adopted the 2017 Omnibus Plan (2017 Plan), which allowed for the grant of stock options, restricted stock units, performance stock units, and other types of equity awards.

On February 19, 2021, James Blome ceased serving as the Company's Chief Executive Officer. The Company recorded a benefit to earnings from a \$2.5 million recapture of non-cash stock compensation expense from the forfeiture of Mr. Blome's unvested stock options, restricted stock units, and performance stock units.

On July 16, 2021, the Company filed a Registration Statement on Form S-8 with the SEC which registered an additional 4,299,904 shares of common stock that may be issued or delivered and sold pursuant to the 2017 Plan and 600,000 shares of common stock that may be issued or delivered and sold pursuant to the Calyxt, Inc. Employee Inducement Incentive Plan (the Inducement Plan). Shares of common stock are issuable under the Inducement Plan upon the settlement of performance stock units which were granted to Mr. Michael A. Carr in July 2021 as a material inducement to accept employment as the Company's President and Chief Executive Officer.

As of September 30, 2021, 5,613,334 shares were registered and available for grant under effective registration statements, while 5,710,787 shares were available for grant in the form of stock options, restricted stock, restricted stock units, and performance stock units under the 2017 Plan. Stock-based awards currently outstanding also include awards granted under the 2014 Plan and the Inducement Plan. No further awards will be granted under either the 2014 Plan or the Inducement Plan.

Stock Options

The estimated fair values of stock options granted and the assumptions used for the Black-Scholes option pricing model were as follows:

	Nine Months End	led Se	ptember 30,
	 2021		2020
Estimated fair values of stock options granted	\$ 3.93	\$	3.32
Assumptions:			
Risk-free interest rate	0.6%-1.1%		0.3%-1.7%
Expected volatility	80.1%-82.0%		77.4%-81.2%
Expected term (in years)	5.5-6.5		6.0-10.0

The Company estimates the fair value of each option on the grant date, or other measurement dates if applicable, using a Black-Scholes option-pricing model, which requires it to make predictive assumptions regarding employee exercise behavior, future stock price volatility, and dividend yield. The Company estimates the risk-free interest rate based on the United States Treasury zero-coupon yield curve at the date of grant for the expected term of the option. The Company estimates its future stock price volatility using the historical volatility of companable public companies over the expected term of the option. The Company's expected term represents the period that options granted are expected to be outstanding determined using the simplified method. The Company does not, nor does it expect to, pay dividends.

Option strike prices are set at 100 percent or more of the closing share price on the date of grant and generally vest over three to six years following the grant date. Options generally expire 10 years after the date of grant.

Information on stock option activity is as follows:

	Weighted- Average Exercise Options Price Per Options Exercisable Share Outstandin				Weighted- Average Exercise Price Per Share	
Balance as of December 31, 2020	2,347,663	\$	10.15	4,621,173	\$ 10.30	
Granted				656,959	5.70	
Exercised				(61,372)	3.70	
Forfeited or expired				(602,892)	10.84	
Balance as of September 30, 2021	2,685,450	\$	10.18	4,613,868	\$ 9.66	

Stock-based compensation expense related to stock option awards is as follows:

					Nin	ne Months Er	September		
	Three Months Ended September 30,					30,			
In Thousands	202	2021		2020		2021	2020		
Stock-based compensation expense	\$	698	\$	187	\$	1,103	\$	2,439	

As of September 30, 2021, options outstanding and exercisable had no aggregate intrinsic value and the weighted average remaining contractual term was 5.8 years.

Net cash proceeds from the exercise of stock options less shares used for minimum withholding taxes and the intrinsic value of options exercised were as follows:

	Three Month	ns Ended Sep	Nine Months Ended September 30,				
In Thousands	2021		2020	20	21		2020
Net cash proceeds	\$	— \$	211	\$	227	\$	211
Intrinsic value of options exercised	\$	— \$	179	\$	344	\$	179

As of September 30, 2021, unrecognized compensation expense related to non-vested stock options was \$5.9 million. This expense will be recognized over 26 months on average.

Restricted Stock Units

The Company grants restricted stock units which generally vest over three to five years after the date of grant. Information on restricted stock unit activity is as follows:

	Number of Restricted Stock Units Outstanding	Weighted Average Gr Date Fair V	ant
Unvested balance at December 31, 2020	547,807	\$	9.49
Granted	346,981		4.99
Vested	(165,137)		7.40
Forfeited	(153,631)		11.85
Unvested balance at September 30, 2021	576,020	\$	6.75

The total grant-date fair value of restricted stock unit awards that vested is as follows:

	Three	e Months E 3	September	Nine Months Ended September 30,				
In Thousands		2021		2020		2021		2020
Grant-date fair value	\$	581	\$	1,079	\$	1,223	\$	2,270

Stock-based compensation expense related to restricted stock units is as follows:

	m1 .		N	ine Months Ended	September		
In Thousands	Three Months Ended September 30, 2021 2020			-	30, 2021	2020	
III Tilousanus		021		2020		2021	2020
Stock-based compensation expense	\$	416	\$	269	\$	(105) \$	865

As of September 30, 2021, unrecognized compensation expense related to restricted stock units was \$2.0 million. This expense will be recognized over 23 months on average.

The Company accounts for stock-based compensation awards granted to employees of Cellectis as deemed dividends. The Company recorded deemed dividends as follows:

			Niı	ne Months	End	ed Se	ptember		
	Three Months Ended September 30,					30, 30,			
In Thousands	202	L		2020		2021			2020
Deemed dividends from grants to Cellectis employees	\$	(84)	\$	581	\$	(55	5)	\$	1,003

Performance Stock Units

In June 2019, the Company granted 311,667 performance stock units under the 2017 Plan to three executive officers. The performance stock units will vest at 50 percent, 100 percent or 120 percent of the shares under the award at the end of a three-year performance period based upon increases in the value of the Company's common stock from the grant price of \$12.48. The performance stock units will be settled in restricted stock upon vesting, with restrictions on transfer lapsing on the second anniversary of the restricted stock issuance date. During the nine months ended September 30, 2021, the Company recognized a benefit from the forfeiture of 166,667 performance stock units held by Mr. Blome, its former chief executive officer.

In July 2021, the Company granted 600,000 performance stock units under the Inducement Plan to Mr. Carr, its President and Chief Executive Officer. The performance stock units will vest if the Company's stock remains above three specified price levels for 30 calendar days over the three-year performance period. The performance stock units will be settled in unrestricted shares of the Company's common stock on the vesting date.

The estimated fair values of performance stock units granted in 2021, and the assumptions used for the Monte Carlo simulation pricing model were as follows:

	Three Months Ended September 30,
	2021
Estimated fair values of performance stock units granted:	
At least \$12 per share	\$2.16
At least \$15 per share	\$1.89
At least \$20 per share	\$1.55
Assumptions:	
Risk-free interest rate	0.4%
Expected volatility	90.0%
Expected term (in years)	3.0

The Company estimated the fair value of each tranche of the performance stock units on the grant date using the Monte Carlo simulation pricing model, which required it to make predictive assumptions as to the expected term of the grant, future stock price volatility, and dividend yield. The Company estimates the risk-free interest rate based on the United States Treasury zero-coupon yield curve at the date of grant for the expected term of the option. Expected volatility was based on the historical volatility of the Company's common stock over the expected term. The expected term represents the expected service period of the performance stock units granted.

Stock-based compensation expense related to performance stock units is as follows:

					Ni	eptember				
	Three Months Ended September 30,					per 30, 30,				
In Thousands	2021		2	020		2021		2020		
Stock-based compensation expense	\$	122	\$	114	\$	(133)	\$	334		

As of September 30, 2021, unrecognized compensation expense related to performance stock units was \$1.7 million. This expense will be recognized over 34 months on average.

6. INCOME TAXES

The Company provides for a valuation allowance when it is more likely than not that it will not realize a portion of the deferred tax assets. The Company has established a full valuation allowance for deferred tax assets due to the uncertainty that enough taxable income will be generated in the taxing jurisdiction to utilize the assets. Therefore, the Company has not reflected any benefit of such deferred tax assets in the accompanying consolidated financial statements.

As of September 30, 2021, there were no material changes to what the Company disclosed regarding tax uncertainties or penalties as of December 31, 2020.

7. LEASES, OTHER COMMITMENTS, AND CONTINGENCIES

Litigation and Claims

The Company is not currently a party to any material pending legal proceeding.

Leases

The Company leases its headquarters facility, office equipment, and other items. The Company's headquarters lease involved the sale of land and improvements to a third-party who then constructed the facility. This lease is considered a financing lease.

The Company also has an equipment financing arrangement that is considered a financing lease. This arrangement has a term of four years for each draw. The Company is required to deposit cash into a restricted account in an amount equal to the future rent payments required by the lease. As of September 30, 2021, restricted cash totaled \$1.0 million. The Company has the option to request the return of excess collateral annually in December, and the amount it expects to receive in December 2021 is reflected as a current asset.

Rent expense from operating leases was as follows:

	Three Mon	Nine Months Ended September 30,						
In Thousands	2021		2020	 2021			2020	
Rent expense from operating leases	\$	10	\$ 24	\$	34	\$		71

Other Commitments

As of September 30, 2021, the Company had noncancelable commitments to purchase grain from growers at dates throughout 2021 aggregating approximately \$0.1 million based on current commodity futures market prices, other payments to growers, and estimated yields per acre. This commitment is not recorded in the consolidated financial statements because the Company has not taken delivery of the grain as of September 30, 2021.

8. SUPPLEMENTAL INFORMATION

Certain balance sheet amounts are as follows:

	As of Sept	ember 30,	As of December 31,			
In Thousands	20	21	2020			
Accounts Receivable:						
Accounts receivable	\$	199	\$	4,317		
Receivables from growers		7		570		
Allowance for doubtful accounts		_		_		
Total	\$	206	\$	4,887		

Certain statements of operations amounts are as follows:

	Thre	Three Months Ended September 30,					Nine Months Ended Septembe 30,					
In Thousands		2021		2020		2021		2020				
Stock compensation expense:												
Research and development	\$	252	\$	(84)	\$	1,061	\$	723				
Selling, general, and administrative		984		654		(196)		2,915				
Total	\$	1,236	\$	570	\$	865	\$	3,638				

						Nine Months Ended September			
	Three	Three Months Ended September 30,				, 30,			
In Thousands		2021	2	2020		2021		2020	
Interest, net:									
Interest expense	\$	(356)	\$	(369)	\$	(1,075)	\$	(1,112)	
Interest income		_		45		16		544	
Total	\$	(356)	\$	(324)	\$	(1,059)	\$	(568)	

Certain balance sheet and statements of cash flows amounts are as follows:

In Thousands	As of September 30, 2021		 December 31, 2020	As	30, 2020
Cash, cash equivalents, restricted cash, and short-term investments:					
Cash and cash equivalents	\$	13,922	\$ 17,299	\$	7,170
Restricted cash		393	393		393
Non-current restricted cash		598	597		1,041
Total cash, cash equivalents, and restricted cash		14,913	18,289		8,604
Short-term investments			11,698		20,802
Total	\$	14,913	\$ 29,987	\$	29,406

9. SEGMENT INFORMATION

The Company operates in a single reportable segment, the development and commercialization of products derived from plant cells. Products commercialized to date have included a soybean and its derivative products, including oil and meal. The Company's current commercial focus is North America.

10. LONG-TERM DEBT

The Company's long-term debt was comprised of a \$1.5 million promissory note pursuant to the Paycheck Protection Program (the PPP loan) established by the Coronavirus Aid, Relief, and Economic Security Act (the CARES Act) implemented by the U.S. Small Business Administration (SBA). The Company received the funds under the PPP loan on April 19, 2020. Subject to certain conditions, the PPP loan and accrued interest were eligible to be forgiven in whole or in part by applying for forgiveness pursuant to the CARES Act and

the Paycheck Protection Program. In order to be eligible for forgiveness, the proceeds of the PPP loan were required to be applied to certain eligible expenses, including payroll costs, interest on certain mortgage obligations, rent payments on certain leases, and certain qualified utility payments, with not more than 40 percent of the amount applied to non-payroll costs.

The Company applied the proceeds from the PPP loan toward qualifying expenses. On October 21, 2020, as modified December 29, 2020, the Company applied for forgiveness of the full principal amount and all accrued interest. On April 8, 2021, the Company was notified by the SBA that the full principal amount and all accrued interest of the PPP loan had been forgiven. Accordingly, the Company recognized a gain upon the extinguishment of the PPP loan for \$1.5 million during the second quarter of 2021.

11. RESTRUCTURING COSTS

On August 4, 2020, the Company approved a move to a streamlined go-to-market strategy for its soybean product line. The impact of the action included staffing adjustments related to soybean processing and product sales, as well as the gradual exit of all supply chain contractual commitments that were not associated with the ongoing soybean seed go-to-market strategy. In the three months ended September 30, 2020, the Company recorded \$0.4 million of cash charges for severance and other related payments and also recorded a \$0.9 million recapture benefit of non-cash stock compensation expense from the forfeiture or modification of unvested stock awards. The Company did not incur any other material costs from the disposal of any assets or contractual terminations in the three and nine months ended September 30, 2021, and 2020. As of December 31, 2020, all severance and transitional expenses were recorded, with \$0.4 million to be paid during 2021. As of September 30, 2021, all amounts related to the restructuring had been paid.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of Calyxt's financial condition and results of operations should be read together with its consolidated financial statements and related notes, which are included elsewhere in this Quarterly Report on Form 10-Q and with its 2020 Form 10-K, including the Consolidated Financial Statements and Notes incorporated therein.

EXECUTIVE OVERVIEW

Calyxt is a plant-based synthetic biotechnology company. The Company leverages its proprietary PlantSpring™ technology platform to engineer plant metabolism to produce innovative, high-value, and sustainable materials and products for use in helping customers meet their sustainability targets and financial goals. The Company's diversified product offerings will primarily be delivered through its proprietary BioFactory™ production system, with the Company's pilot BioFactory expected to be online by the end of 2021.

The PlantSpring Technology Platform

PlantSpring is a platform with a full suite of capabilities that is founded on the Company's more than a decade of experience engineering plant metabolism and includes its scientific knowledge, its proprietary systems, tools, technologies, and an expanding set of artificial intelligence and machine learning (AIML) capabilities. Through PlantSpring, the Company is able to unleash the natural capabilities of the plant, the original biological system, and make available a platform for harnessing chemistries from rare or undomesticated plant species in a more robust and sustainable manner.

The PlantSpring platform delivers innovation through an efficient development process, leveraging knowledge gained from past activity when developing the next compound. The process includes identification of breakthrough plant-based chemistries based on customer needs, design strategies to reprogram host cells, engineering of plant cell metabolism to optimally produce targeted compounds, and production of those targeted compounds at laboratory scale.

In the "design" phase, the Company uses systems and insights to identify metabolic pathways, target genes controlling these pathways, develop strategies for optimized expression of the target genes, and design the technical approach to achieve the targeted compound. In the "engineer" phase, the Company directs changes in the plant cells using one or more of tissue culture, gene editing capabilities, and other genetic transformation techniques. In the "verify" stage, the Company's rapid prototyping system can quickly produce compounds, which can be verified against customer specifications using natural product chemistry, metabolomics, genomics, gene expression tools, and other analytics. This system and these analytical tools will quickly ensure the exact compound desired by the customer has been produced and accelerates new product development and delivery, all while collecting data and learning, and reapplying these learnings in future product development activities.

Calyxt has developed early-stage AIML capabilities in PlantSpring, which enable learning and adaptation of knowledge gained from past activity and can be combined with predictive analytics to rapidly prototype and provide feedback, accelerating the time to complete the design-engineer-verify development cycle and helping mitigate the risk associated with commercial scale-up. These capabilities leverage Calyxt's deep scientific experience and vast amounts of data that it has accumulated over its history, including a large proprietary database of genomic information across numerous plant species. PlantSpring's AIML capabilities are also expected to integrate publicly available and other data over time. As a result, Calyxt believes it can develop biomolecules in plants for customers at faster speeds than its competitors in the synthetic biology industry. Calyxt expects to continue to develop its AIML capabilities across all elements of PlantSpring and anticipates those benefits to continue to drive down the development timeframes.

Customer Demand-Driven Commercialization Strategies

The Company intends to commercialize its PlantSpring technology platform using three customer demand-driven commercialization strategies. These strategies include the development and sale of high-value products from the Company's proprietary BioFactory production system, technology licensing of elements of the PlantSpring technology platform and historically developed product candidates, and selective product development for customers focused on traditional agriculture.

The BioFactory

The Company intends to focus its product development efforts on its BioFactory production system. The BioFactory will enable Calyxt to expand its production methods from outdoor agriculture systems to include controlled environment, bioreactor-based production systems. The BioFactory is a natural evolution of how PlantSpring is applied.

The BioFactory harnesses the potential of plant cells in a multicellular matrixed structure and utilizes nutrient media for its production. The BioFactory also leverages multiple cell types and the multicellular matrix structure enables processing of molecules of increased complexity relative to those possible using traditional fermentation systems or single cell plant culture methods. In addition, the speed of the multicellular matrix growth over time is expected to accelerate the production of the compound at scale. As a result, the Company believes that its production system is capable of unlocking the power of plants to produce complex compounds that are finite, difficult to source sustainably, and that may not be able to be produced using other production methods. The BioFactory is driven by the output from PlantSpring. In combination, the Company expects that the BioFactory and PlantSpring are capable of producing high-value plant-based compounds for use in a wide range of sectors at greater speed compared to other approaches.

The Company has been running lab-scale bioreactors for several months and its first pilot-scale bioreactor has been commissioned and is expected to be online by the end of 2021. The initial pilot bioreactor is scalable up to nearly 200 liters, and the Company expects to expand the scope of its pilot facilities based on customer demand. There may be a range of vessel sizes between the initial pilot facility and commercial production. For transition from pilot to commercialization, the Company's current plan is to use third parties, referred to as infrastructure partners, for at-scale BioFactory production. The infrastructure partners are expected to be paid a fee for their production of compounds for Calyxt. This allows the Company to operate the BioFactory in an asset-light manner and mitigate the risk of achieving production at scale. These are both key elements of the business model and strategy for commercializing the BioFactory.

The Company has developed a set of criteria by which it will evaluate opportunities and drive focus for its development efforts that includes consideration of factors such as the nature of the customers' need, the size of the market or markets served, the speed of adoption, the capabilities of the BioFactory, and financial returns. Compared to the Company's historical experience, when combining PlantSpring with the BioFactory, its costs to develop a compound are expected to decline significantly. In addition, as the Company continues to develop and augment its AIML capabilities, it anticipates that associated development cycles will become increasingly more efficient. From a financial standpoint, the Company anticipates that its customers will fund the development costs of their particular compound or compounds, and once at-scale production is achieved, the customer would purchase the compound from Calyxt pursuant to a supply agreement.

Target addressable markets for the BioFactory are expected to be valuable and diverse because plant-based synthetic biology can be used to produce compounds and products quickly and cost-effectively, and with desirable sustainability features. The Company believes that potential end markets for plant-based sustainable solutions are vast. In the near term, the Company intends to focus its customer activation and development efforts in a narrower market segmentation where it believes its current BioFactory capability gives it the best opportunity to capture a share of the addressable market. These end markets include the nutraceutical, cosmeceutical, pharmaceutical, advanced materials, and chemicals industries. These end markets contain attractive potential customers, as many significant market participants take action to achieve corporate sustainability targets, including reduction of their carbon footprints.

The Company believes the BioFactory has the potential to be one of the most sustainable production systems across industries because of its production methodology, which aligns well with customers, who have goals of replacing existing compounds with more sustainable alternatives. The BioFactory does not use fermentation, and there are fewer of the sustainability challenges associated with other controlled environment production systems, including lower levels of off-gasses, reduced water demands, and lower energy requirements. The BioFactory is also expected to have limited downtime between production cycles and because it produces these compounds year-round in a controlled environment bioreactor, the system is protected from many of the adverse climate effects typically associated with agricultural production.

Technology Licensing & Agricultural Product Development

In addition to the Company's core demand-driven synthetic biology solutions to be executed through PlantSpring and the BioFactory, Calyxt maintains the capability to implement broad technology licensing arrangements and to develop agricultural products.

Technology licensing opportunities span the Company's intellectual property portfolio built over more than a decade as a leading plant-based biotechnology company, including multiple gene editing platforms, plant breeding, and other capabilities. In addition to new customer-driven opportunities, technology-licensing activity includes the licensing of historically developed product candidates, including soybeans with improved fatty-acid profiles; an alfalfa able to be better digested by livestock, which will be commercialized by S&W Seed Company; wheat with a higher fiber content than traditionally bred varieties, and its second generation soybean product, which has an improved fatty acid profile compared to commodity soybeans and Calyxt's initial soybean product launched in 2019. Among the Company's other successes in engineering are the development of a soybean with improved flavor to help enable wider adoption for plant-based protein applications and controlling the production of storage sugars in potatoes to improve fry quality and reduce acrylamide. While the Company will pursue licensing opportunities for these product candidates, it expects there will be limited investment in further development until licensee customers are identified.

The Company's PlantSpring technology platform has been utilized to drive industry-leading modernization of the hemp species, including improved characteristics for protein and oil production and use in advanced materials. Hemp can also service a wide variety of materials science needs including strengthening plastics, reducing petroleum-based content, and providing greater strength and longevity compared to other plant-based fabrics like linen or cotton. The Company has successfully transformed the hemp genome and also has produced "pollen-proof" (seedless) hemp with its triploid breeding technology. Combined, the Company's hemp advancements offer significant advantages in innovation, crop management, and harvest potential.

The Company will also continue to opportunistically develop products for customers focused on traditional agriculture. For example, in September 2021, the Company announced that it had entered into a research collaboration with a global food ingredient manufacturer based in Asia to develop an improved soybean capable of producing an oil as a commercial alternative to palm oil. To manage prioritization of resources and to drive returns on its investment, the Company has developed a set of criteria by which all opportunities to develop products for agriculture are evaluated, which include the size of the overall opportunity, the nature of the product to be developed, and the amount of cash it expects to receive both up front and over time.

Under the technology licensing and product development for agriculture strategies, the Company expects that its potential customers will primarily be seed companies, biotechnology companies, germplasm providers, large agricultural processors, and others in the relevant plant species' supply chain.

Select Recent Achievements and Developments:

	Appointed Michael A. Carr as its President, Chief Executive Officer, and member of its Board of Directors. Mr. Carr brings more than 20 years of business, financial and operational leadership experience to the Company and will focus on advancing and monetizing its technologies. Prior to joining Calyxt, Mr. Carr most recently served as Vice President of M&A, Strategy, and Innovation at Darling Ingredients, Inc.
	Launched a \$50.0 million ATM Facility. As of the date of this report, the Company has issued approximately 1.2 million shares of common stock under the ATM Facility for proceeds of \$3.7 million net of commissions and payments for other share issuance costs.
	Entered into a research collaboration with a leading global food ingredient manufacturer based in Asia to develop an improved soybear capable of producing an oil as a sustainable commercial alternative to palm oil. As part of the research collaboration, the Company wil receive cash payments in each of the two years of its term. This collaboration agreement also includes a commercial option for the global food ingredient manufacturer.
	Announced the appointment of Seth Dobrin, Ph.D., to its Scientific Advisory Board. Dr. Dobrin is the Global Chief Artificial Intelligence Officer at IBM and brings extensive leadership experience and a track record of transforming companies through data and AI. Dr. Dobrin's deep experience bringing AI-based business solutions to major global corporations will be invaluable as the Company continues to develop and augment the AIML capabilities of its PlantSpring platform and BioFactory production system.
	Completed the sale of nearly all the 2020 grain crop to date to Archer Daniels Midland, with the remaining grain projected to be sold by the end of the calendar year. This series of transactions, which began in the third quarter of 2020, has generated \$35.7 million in total cash since sales commenced.
deficit o	npany is an early-stage company and has incurred net losses since its inception. As of September 30, 2021, the Company had an accumulated f \$189.0 million. The Company's net losses were \$22.1 million for the nine months ended September 30, 2021. The Company expects to continue significant expenses and operating losses for the next several years. Those expenses and losses may fluctuate significantly from quarter-to-quarte

and year-to-year. The Company expects that its expenses will be primarily driven by:

una	year to year. The company expects that its expenses win be primarily driven by.
	Research and development (R&D) expenses to continue to enhance the capabilities of its PlantSpring technology platform, including continued investments in artificial intelligence and machine learning capabilities;
	R&D expenses and capital expenditures to expand its BioFactory production system from lab through various pilot vessel sizes;
	other R&D expenses to develop non-BioFactory-based innovative, sustainable, and high-value products for its customers;
	to the extent not reimbursed by its customers, conducting regulatory studies and other associated activities for its current and future products under
	development;
	acquiring or in-licensing other products, technologies, germplasm, or other biological material;

	maintaining, protecting, expanding, and defending its intellectual property portfolio, including intellectual property related to the PlantSpring
	technology platform and BioFactory;
П	seeking to attract and retain skilled personnel;

identifying and negotiating agreements under the applicable go-to-market strategy with customers, licensees, and infrastructure partners; and

experiencing any delays or encountering issues with any of the above, including due to the COVID-19 pandemic and its impacts.

RELATIONSHIP WITH CELLECTIS AND COMPARABILITY OF RESULTS

The Company is a majority-owned subsidiary of Cellectis. As of September 30, 2021, Cellectis owned 64.2 percent of the Company's issued and outstanding common stock. Cellectis has certain contractual rights as well as rights pursuant to the Company's certificate of incorporation and bylaws, in each case, as long as it maintains threshold beneficial ownership levels in the Company's shares.

The Company holds an exclusive license from Cellectis that broadly covers the use of engineered nucleases for plant gene editing. This intellectual property covers methods to edit plant genes using "chimeric restriction endonucleases," which include TALEN[®], CRISPR/Cas9, zinc finger nucleases, and some types of meganucleases.

Cellectis has also guaranteed the lease of the Company's headquarters facility.

FINANCIAL OPERATIONS OVERVIEW

Revenue

Revenue is recognized from sales of products, from licenses of technology, and from product development activities for customers. For the three and nine months ended September 30, 2021, and 2020, the Company recognized revenue solely from the sales of soybean products.

Cost of Goods Sold

Costs of goods sold are recognized as products are sold or as applicable under product development agreements. There are generally minimal costs of goods sold associated with the Company's technology licensing activities.

Research and Development Expense

R&D expenses consist of the costs of performing activities to discover and develop products and advance the Company's PlantSpring technology platform, including its intellectual property portfolio. BioFactory expenses from lab to pilot, unless incurred related to a product sold to a customer, are also classified as R&D expense. The Company recognizes R&D expenses as they are incurred.

The Company's R&D expenses consist primarily of employee-related costs for personnel who research and develop its product candidates, fees for contractors who support product development activities, purchasing material and supplies for its laboratories, licensing, an allocation of facility and information technology expenses, and other costs associated with owning and operating its own laboratories and pilot BioFactory capabilities. R&D expenses also include costs to write and support the research for filing patents.

Selling, General, and Administrative Expense

Selling, general, and administrative (SG&A) expenses consist primarily of employee-related expenses for selling and licensing the Company's products and employee-related expenses for its executive, legal, intellectual property, information technology, finance, and human resources functions. In periods prior to 2021, these expenses also included employee-related and other expenses for selling soybean oil and meal, soybean acreage acquisition, and managing the soybean product supply chain. Other SG&A expenses include facility and information technology expenses not otherwise allocated to R&D expenses, professional fees for auditing, tax and legal services, expenses associated with maintaining patents, consulting costs and other costs of the Company's information systems, and costs to market its products.

Interest, net

Interest, net is comprised of interest income resulting from investments of cash and cash equivalents, short-term investments, unrealized gains and losses on short-term investments, and interest expense incurred related to financing lease obligations. It is also driven by balances, yields, and timing of financing and other capital raising activities.

Non-operating expenses

Non-operating expenses are expenses that are not directly related to ongoing operations and are primarily comprised of gains and losses from foreign exchange-related transactions and disposals of land, buildings, and equipment.

Anticipated Changes Between Revenues and Costs

As the Company executes upon its business model, it expects the composition of revenues and costs to evolve. In the near-term, soybean-related revenues will decline to zero, the negative gross profit margins experienced from sales of those products will no longer occur, and the significant working capital investment to support those activities will also decline. As a result, the Company anticipates most of its revenues in the near-term to be from product development activities for customers for both the BioFactory and agricultural production and technology licensing arrangements. Future cash and revenue-generating opportunities associated with these activities are expected to primarily arise from up-front, annual or milestone, and royalty payments. Over the next several years as the BioFactory begins to produce products for customers, it is anticipated those revenues will grow and surpass revenues from other sources. These revenues are anticipated to have strong positive gross profit margins over time.

Recent Developments - COVID-19 Update

In accordance with the Company's COVID-19 Preparedness Plan, Minnesota executive order requirements, and guidelines promoted by the Centers for Disease Control and Prevention, the Company implemented health and safety measures for the protection of its onsite workers, maintained remote work arrangements for its non-laboratory personnel, and implemented, as necessary, appropriate self-quarantine precautions for potentially affected laboratory personnel. On May 28, 2021, nearly all Minnesota COVID-19 restrictions came to an end, including all capacity limits and distancing requirements - both indoors and outdoors. The Company's non-laboratory personnel returned to working onsite in mid-July 2021.

During the nine months ended September 30, 2021, the COVID-19 pandemic did not have a material impact on the Company's operations. However, a resurgence or prolonging of the COVID-19 pandemic, governmental response measures, and resulting disruptions could rapidly offset such improvements. Moreover, the effects of the COVID-19 pandemic on the financial markets remain substantial and broader economic uncertainties persist, which may make obtaining capital challenging and have exacerbated the risk that such capital, if available, may not be available on terms acceptable to the Company. There continues to be significant uncertainty relating to the COVID-19 pandemic and its impact, and many factors could affect the Company's results and operations, including, but not limited to, those described in Part I, Item 1A, "Risk Factors" of its 2020 Form 10-K.

RESULTS OF OPERATIONS FOR THE THREE MONTHS ENDED SEPTEMBER 30, 2021, COMPARED TO THE THREE MONTHS ENDED SEPTEMBER 30, 2020

A summary of the Company's results of operations for the three months ended September 30, 2021, and 2020 is as follows:

Three I	Months	Ended	Septem	ber 30,	

	 2021	2020	\$ Change	% Change	
Revenue	\$ 7,762 \$	5,241 \$	2,521	48 %	
Cost of goods sold	8,281	7,060	1,221	17%	
Gross profit	(519)	(1,819)	1,300	71 %	
Research and development	2,579	2,204	375	17%	
Selling, general, and administrative	3,859	4,523	(664)	(15)%	
Management fees	_	68	(68)	NM	
Restructuring costs	_	436	(436)	NM	
Loss from operations	(6,957)	(9,050)	2,093	23 %	
Interest, net	(356)	(324)	(32)	(10)%	
Non-operating expenses	6	(102)	108	106%	
Net loss	\$ (7,307) \$	(9,476) \$	2,169	23 %	
Basic and diluted net loss per share	\$ (0.20) \$	(0.29) \$	0.09	31 %	
Adjusted EBITDA ¹	\$ (6,941) \$	(6,968) \$	27	0%	

¹ See "Use of Non-GAAP Financial Information" elsewhere in this report for a discussion of Adjusted Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) and a reconciliation of Adjusted EBITDA to Net loss, the most comparable GAAP measure.

NM - not meaningful

Revenue

Revenue was \$7.8 million in the third quarter of 2021, an increase of \$2.5 million, or 48 percent, from the third quarter of 2020. The increase was driven by the volume and mix of product sold in the quarter, as the Company sold grain in the third quarter of 2021 as compared to the third quarter of 2020, when the Company was primarily selling soybean oil and meal.

Cost of Goods Sold

Cost of goods sold was \$8.3 million in the third quarter of 2021, an increase of \$1.2 million, or 17 percent, from the third quarter of 2020. The increase was driven by higher volumes of product sold and higher average prices paid for grain due to increases in commodity market prices for soybeans. These increases were partially offset by the benefits resulting from the move to sell grain compared to selling primarily soybean oil and meal, as well as a \$2.1 million year-over-year benefit from unrealized commodity derivative gains from hedging contracts entered into to convert fixed price grain inventories and Forward Purchase Contracts to floating prices, consistent with how the grain was sold. As a result of the continued wind-down of the Company's soybean product line, the Company held no commodity derivative contracts at September 30, 2021.

Gross Profit and Adjusted Gross Profit

Gross profit was negative \$0.5 million, or negative seven percent of revenue, in the third quarter of 2021, compared to negative \$1.8 million, or negative 35 percent of revenue, in the third quarter of 2020. This increase of \$1.3 million, or 71 percent, from the third quarter of 2020 was largely driven by the benefits resulting from the move to sell grain compared to selling primarily oil and meal, as well as a \$2.1 million year-over-year benefit from unrealized commodity derivative gains, as described above.

Adjusted gross profit, a non-GAAP measure, was negative \$2.7 million, or negative 35 percent of revenue, in the third quarter of 2021, compared to negative \$1.3 million, or negative 24 percent of revenue, in the third quarter of 2020. The decrease on a percentage basis was driven by the net prices paid for grain sold in the third quarter of 2021 compared to the mix of products sold and related margins in the third quarter of 2020.

See below under the heading "Use of Non-GAAP Financial Information" for a discussion of adjusted gross profit and adjusted gross profit percentage and a reconciliation of gross profit and gross profit percentage, the most comparable GAAP measure, to adjusted gross profit and adjusted gross profit percentage, respectively.

Research and Development Expense

R&D expense was \$2.6 million in the third quarter of 2021, an increase of \$0.4 million, or 17 percent, compared to the third quarter of 2020. The increase was primarily driven from the recapture of non-cash stock compensation expense from the forfeiture and modification of unvested stock awards in the third quarter of 2020.

Selling, General, and Administrative Expense

SG&A expense was \$3.9 million in the third quarter of 2021, a decrease of \$0.7 million, or 15 percent, from the third quarter of 2020. The decrease was driven by lower personnel costs and non-cash stock compensation expense as a result of the reduction in cost following the move to sell grain compared to selling oil and meal, as well as other reductions in operating expenses.

Management Fees

Management fees were nominal for the three months ended September 30, 2021, and 2020.

Restructuring Costs

In the third quarter of 2020, the Company approved a move to a streamlined go-to-market strategy for its soybean product line. The impact of the action included staffing adjustments related to soybean processing and product sales, as well as the gradual exit of all supply chain contractual commitments that were not associated with the ongoing soybean seed go-to-market strategy. As a result, the Company recorded \$0.4 million of cash charges for severance and other related payments.

Interest, net

Interest, net was an expense of \$0.4 million in the third quarter of 2021, essentially flat compared to the third quarter of 2020.

Net Loss and Adjusted Net Loss

Net loss was \$7.3 million in the third quarter of 2021, an improvement of \$2.2 million, or 23 percent, from the third quarter of 2020. The improvement in net loss was driven by improved gross profits and reduced operating expenses.

Adjusted net loss was \$9.1 million in the third quarter of 2021, essentially flat compared to the third quarter of 2020.

See below under the heading "Use of Non-GAAP Financial Information" for a discussion of adjusted net loss and a reconciliation of net loss, the most comparable GAAP measure, to adjusted net loss.

Net Loss Per Share and Adjusted Net Loss Per Share

Net loss per share was \$0.20 in the third quarter of 2021, an improvement of \$0.09 per share, or 31 percent, from the third quarter of 2020. The improvement in net loss per share was driven by the change in net loss and the year-over-year increase in the weighted average share count.

Adjusted net loss per share was \$0.24 in the third quarter of 2021, an improvement of \$0.04 per share, or 14 percent, from the third quarter of 2020. The improvement in adjusted net loss per share was driven by the year-over-year increase in the weighted average share count.

See below under the heading "Use of Non-GAAP Financial Information" for a discussion of adjusted net loss per share and a reconciliation of net loss per share, the most comparable GAAP measure, to adjusted net loss per share.

Adjusted EBITDA

Adjusted EBITDA loss was \$6.9 million in the third quarter of 2021, essentially flat compared to the third quarter of 2020.

See below under the heading "Use of Non-GAAP Financial Information" for a discussion of adjusted EBITDA and a reconciliation of net loss, the most comparable GAAP measure, to adjusted EBITDA.

RESULTS OF OPERATIONS FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2021, COMPARED TO THE NINE MONTHS ENDED SEPTEMBER 30, 2020

A summary of the Company's results of operations for the nine months ended September 30, 2021, and 2020 is as follows:

For the Nine Months Ended September 30,

	Tor the white believe september 50,						,
		2021		2020		Change	% Change
Revenue	\$	24,044	\$	9,925	\$	14,119	142 %
Cost of goods sold		26,553		16,265		10,288	63 %
Gross profit		(2,509)		(6,340)		3,831	60 %
Research and development		8,473		7,816		657	8%
Selling, general, and administrative		11,595		15,988		(4,393)	(27)%
Management fees		45		172		(127)	(74)%
Restructuring costs		_		436		(436)	NM
Loss from operations		(22,622)		(30,752)		8,130	26 %
Gain upon extinguishment of Payroll Protection Program loan		1,528		_		1,528	NM
Interest, net		(1,059)		(568)		(491)	(86)%
Non-operating expenses		11		(121)		132	109 %
Net loss	\$	(22,142)	\$	(31,441)	\$	9,299	30 %
Basic and diluted net loss per share	\$	(0.60)	\$	(0.95)	\$	0.35	37 %
Adjusted EBITDA ¹	\$	(19,582)	\$	(21,706)	\$	2,124	10 %

¹ See "Use of Non-GAAP Financial Information" elsewhere in this report for a discussion of Adjusted Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) and a reconciliation of Adjusted EBITDA to Net loss, the most comparable GAAP measure.

NM- not meaningful

Revenue

Revenue was \$24.0 million in the first nine months of 2021, an increase of \$14.1 million, or 142 percent, from the first nine months of 2020. The increase was driven by sales of a portion of the 2020 grain crop as compared to the first nine months of 2020, when the Company was primarily selling soybean oil and meal. As of September 30, 2021, the Company had sold substantially all of the 2020 grain crop.

Cost of Goods Sold

Cost of goods sold was \$26.6 million in the first nine months of 2021, an increase of \$10.3 million, or 63 percent, from the first nine months of 2020. The increase was driven by higher volumes of product sold and higher average prices paid for grain as a result of increases in commodity market prices for soybeans. These increases were partially offset by the benefits resulting from the move to sell grain compared to selling soybean oil and meal, as well as a \$3.7 million year-over-year decrease in net realizable value adjustments to inventory as the year ago period included costs to write down excess seed inventory, and \$3.1 million year-over-year benefit from unrealized commodity derivative gains from hedging contracts entered into to convert fixed price grain inventories and Forward Purchase Contracts to floating prices, consistent with how the grain was sold. As a result of the continued wind-down of the Company's soybean product line, the Company held no commodity derivative contracts at September 30, 2021.

Gross Profit and Adjusted Gross Profit

Gross profit was negative \$2.5 million, or negative 10 percent of revenue, in the first nine months of 2021, compared to negative \$6.3 million, or negative 64 percent of revenue, in the first nine months of 2020. This is an improvement of \$3.8 million, or 60 percent from the first nine months of 2020 and was driven by the benefits resulting from the move to sell grain compared to selling oil and meal, as well as a \$3.7 million year-over-year decrease in net realizable value adjustments to inventory as the year ago period included costs to write down excess seed inventory, and \$3.1 million year-over-year benefit from unrealized commodity derivative gains, as described above.

Adjusted gross profit, a non-GAAP measure, was negative \$5.2 million, or negative 22 percent of revenue, in the first nine months of 2021, compared to negative \$3.2 million, or negative 33 percent of revenue, in the first nine months of 2020. The improvement on a percentage basis was driven by benefits resulting from the move to sell grain compared to selling oil and meal.

See below under the heading "Use of Non-GAAP Financial Information" for a discussion of adjusted gross profit and adjusted gross profit percentage and a reconciliation of gross profit and gross profit percentage, the most comparable GAAP measure, to adjusted gross profit and adjusted gross profit percentage, respectively.

Research and Development Expense

R&D expense was \$8.5 million in the first nine months of 2021, an increase of \$0.7 million, or 8 percent, from the first nine months of 2020. The increase was driven by an increase in personnel costs, other operating expenses, and the recapture of non-cash stock compensation expense from the forfeiture and modification of unvested stock awards in the third quarter of 2020.

Selling, General, and Administrative Expense

SG&A expense was \$11.6 million in the first nine months of 2021, a decrease of \$4.4 million, or 27 percent, from the first nine months of 2020. The decrease was driven by lower non-cash stock compensation expenses primarily from the recapture of stock compensation from forfeitures of unvested stock awards primarily from the departure of the former CEO, and other reductions in personnel costs and professional fees. These decreases were partially offset by an increase in Section 16 officer transition expenses.

Management Fees

Management fees were nominal for the first nine months of 2021 and 2020.

Restructuring Costs

In 2020, the Company approved a move to a streamlined go-to-market strategy for its soybean product line. The impact of the action included staffing adjustments related to soybean processing and product sales, as well as the gradual exit of all supply chain contractual commitments that were not associated with the ongoing soybean seed go-to-market strategy. As a result, the Company recorded \$0.4 million of cash charges for severance and other related payments.

Gain Upon Extinguishment of Payroll Protection Program Loan

On April 8, 2021, the Company was notified by the SBA that the full principal amount and all accrued interest of the PPP loan had been forgiven. Accordingly, the Company recognized a gain upon the extinguishment of the PPP loan of \$1.5 million.

Interest, net

Interest, net was an expense of \$1.1 million in the first nine months of 2021, a \$0.5 million decrease, or 86 percent, compared to the first nine months of 2020. The decline was driven by lower balances and lower rates on invested cash balances.

Net Loss and Adjusted Net Loss

Net loss was \$22.1 million in first nine months of 2021, an improvement of \$9.3 million, or 30 percent, from the first nine months of 2020. The improvement in net loss was driven by improved gross profits, reduced operating expenses, and the gain upon the extinguishment of the PPP loan.

Adjusted net loss was \$25.8 million in the first nine months of 2021, an improvement of \$2.8 million, or 10 percent, from the first nine months of 2020. The improvement in adjusted net loss was driven by the benefits resulting from the move to sell grain compared to selling oil and meal and reductions in operating expenses.

See below under the heading "Use of Non-GAAP Financial Information" for a discussion of adjusted net loss and a reconciliation of net loss, the most comparable GAAP measure, to adjusted net loss.

Net Loss Per Share and Adjusted Net Loss Per Share

Net loss per share was \$0.60 in the first nine months of 2021, an improvement of \$0.35 per share, or 37 percent, from the first nine months of 2020. The improvement in net loss per share was driven by the change in net loss and the year-over-year increase in the weighted average share count.

Adjusted net loss per share was \$0.69 in the first nine months of 2021, an improvement of \$0.18 per share, or 21 percent, from the first nine months of 2020. The improvement in adjusted net loss per share was driven by the change in adjusted net loss and the year-over-year increase in the weighted average share count.

See below under the heading "Use of Non-GAAP Financial Information" for a discussion of adjusted net loss per share and a reconciliation of net loss per share, the most comparable GAAP measure, to adjusted net loss per share.

Adjusted EBITDA

Adjusted EBITDA loss was \$19.6 million in the first nine months of 2021, an improvement of \$2.1 million, or 10 percent, from the first nine months of 2020. The improvement was driven by the benefits resulting from the move to sell grain compared to selling oil and meal and reductions in operating expenses.

See below under the heading "Use of Non-GAAP Financial Information" for a discussion of adjusted EBITDA and a reconciliation of net loss, the most comparable GAAP measure, to adjusted EBITDA.

LIQUIDITY AND CAPITAL RESOURCES

Liquidity

The Company's primary source of liquidity is its cash and cash equivalents, with additional liquidity accessible, subject to market conditions and other factors, from the capital markets.

As of September 30, 2021, the Company had \$14.9 million of cash, cash equivalents, and restricted cash. The Company's restricted cash is associated with its equipment financing leases and was \$1.0 million as of September 30, 2021, with \$0.4 million scheduled to be returned in December 2021.

On September 21, 2021, the Company entered into an ATM Facility with Jefferies, acting as sole selling agent. Under the terms of the ATM Facility, the Company may, from time-to-time, issue common stock having an aggregate offering value of up to \$50.0 million. At its discretion the Company determines the timing and number of shares to be issued under the ATM Facility.

As of September 30, 2021, the Company had not issued any shares of common stock under the ATM Facility. As of the date of this report, the Company has issued approximately 1.2 million shares of common stock under the ATM Facility for proceeds of \$3.7 million net of commissions and payments for other share issuance costs.

The Company's liquidity funds its non-discretionary cash requirements and its discretionary spending. Working capital is the Company's principal non-discretionary funding requirement, which the Company anticipates will decline over the remainder of 2021 as it winds-down grain purchases and associated sales. In addition, the Company has contractual obligations related to recurring business operations, primarily related to its headquarters and laboratory facilities. The Company's principal discretionary cash spending is for capital expenditures.

The Company incurred losses from operations of \$7.0 million for the three months ended September 30, 2021, and \$22.6 million for the nine months ended September 30, 2021. As of September 30, 2021, the Company had an accumulated deficit of \$189.0 million and expects to continue to incur losses in the future.

Cash Flows from Operating Activities

	For the Nine Months Ended September 30,							
In Thousands		2021	2020	\$ Change	% Change			
Net loss	\$	(22,142) \$	(31,441) \$	9,299	30 %			
Gain upon extinguishment of Payroll Protection Program loan		(1,528)	_	(1,528)	NM			
Depreciation and amortization expense		1,776	1,372	404	29 %			
Stock-based compensation		865	3,638	(2,773)	(76)%			
Changes in operating assets and liabilities		6,375	(4,460)	10,835	243 %			
Net cash used by operating activities	\$	(14,654) \$	(30,891) \$	16,237	53%			

NM- not meaningful

Net cash used by operating activities was \$14.7 million in the first nine months of 2021, an improvement of \$16.2 million, or 53 percent, from the first nine months of 2020. The decrease was driven by a \$10.8 million improvement in cash used by operating assets and liabilities as the Company converted a substantial amount of inventory and accounts receivable to cash in 2021 compared to the same period in 2020, and a \$9.3 million decrease in net loss. These improvements were partially offset by a \$2.8 million decrease in non-cash

stock compensation, primarily the result of the forfeiture of unvested stock awards, and the \$1.5 million non-cash gain upon the extinguishment of the PPP loan

The Company expects net cash used by operating activities over the fourth quarter of 2021 to be lower than the same period of 2020 as a result of working capital improvements and expense reductions.

Cash Flows from Investing Activities

	For the Nine Months Ended September 30,									
In Thousands		2021		2020	\$ Change	% Change				
Sales and (purchases) of short-term investments, net	\$	11,698	\$	(20,802)	\$ 32,500	156%				
Purchases of land, buildings, and equipment		(376)		(1,253)	877	70 %				
Net cash provided (used) by investing activities	\$	11,322	\$	(22,055)	\$ 33,377	151 %				

Net cash provided by investing activities was \$11.3 million in the first nine months of 2021, an increase of \$33.4 million, or 151 percent, from the first nine months of 2020. This increase was driven by changes in purchases and sales of short-term investments, as the first nine months of 2020 saw the Company invest its cash in short-term investments while the first nine months of 2021 reflects the draw-down of those short-term investments to fund operations.

The Company expects net cash used for purchases of land, buildings, and equipment for the full year 2021 to be lower than net cash used for purchases of land, building, and equipment in 2020.

Cash Flows from Financing Activities

	Nine Months Ended September 30,						
In Thousands		2021	2020		Change	% Change	
Repayments of financing lease obligations	\$	(271) \$	(217)	\$	(54)	(25)%	
Proceeds from the exercise of stock options		227	211		16	8%	
Proceeds from Paycheck Protection Program loan		_	1,518		(1,518)	NM	
Net cash (used) provided by financing activities	\$	(44) \$	1,512	\$	(1,556)	(103)%	

NM - not meaningful

Net cash provided used by financing activities was nominal in the first nine months of 2021, a decrease of \$1.6 million, or 103 percent, from the first nine months of 2020. The decrease was primarily driven by the cash inflows from the \$1.5 million PPP loan received in the first nine months of 2020.

The Company expects net cash used or provided by financing activities in the fourth quarter of 2021 to be similar to prior periods for repayments of financing lease obligations, with the potential for share issuance proceeds from the ATM Facility to be a source of cash in the period. As of the date of this report, the Company has issued approximately 1.2 million shares of common stock under the ATM Facility for proceeds of \$3.7 million net of commissions and payments for other share issuance costs.

CAPITAL RESOURCES

Operating Capital Requirements

Calyxt is an early-stage company and has incurred net losses since its inception. As of September 30, 2021, the Company had an accumulated deficit of \$189.0 million. The Company's net losses were \$22.1 million for the nine months ended September 30, 2021, and the Company used \$14.7 million of cash for operating activities for the nine months ended September 30, 2021. The Company's primary sources of liquidity are its cash and cash equivalents.

As of September 30, 2021, the Company had \$14.9 million of cash, cash equivalents, and restricted cash. The Company's restricted cash is associated with its equipment financing leases and was \$1.0 million as of September 30, 2021, with \$0.4 million scheduled to be returned in December 2021. Current liabilities were \$5.1 million as of September 30, 2021.

On September 21, 2021, the Company entered into an ATM Facility with Jefferies, acting as sole selling agent. Under the terms of the ATM Facility, the Company may, from time-to-time, issue common stock having an aggregate offering value of up to \$50.0 million. At its discretion the Company determines the timing and number of shares to be issued under the ATM Facility. As of the date of this report, the Company has issued approximately 1.2 million shares of common stock under the ATM Facility for proceeds of \$3.7 million net of commissions and payments for other share issuance costs.

The Company's current operating plans reflect a modest level of payments from customers from commercial activities in 2022, which when combined with planned spending and the current balance of cash and cash equivalents make it likely that it will require additional liquidity to continue operations under this business plan over the next 12 months. Absent payments from customers in excess of Calyxt's operating plans or the ability to raise capital, the Company's management believes it can implement various cost reduction and other cash-focused measures in order to manage liquidity for the next 12 months.

The Company anticipates that it will continue to generate losses for the next several years before revenue is enough to support its operating capital requirements. Until the Company can generate substantial cash flow, it expects to finance a portion of future cash needs through cash on hand, commercialization activities, which may result in various types of revenue streams from (i) product sales from its proprietary BioFactory production system, and (ii) future product development agreements and technology licenses, including upfront and milestone payments, annual license fees, and royalties; government or other third-party funding, public or private equity or debt financings, or the issuance of shares under the Company's ATM Facility. However, additional capital may not be available on reasonable terms, if at all. If the Company is unable to raise additional capital in a sufficient amount or on acceptable terms, it may have to significantly delay, scale back, or discontinue the development or commercialization of its activities. Failure to receive additional funding could cause the Company to cease operations, in part or in full. If the Company raises additional funds through the issuance of additional debt or equity securities, it could result in dilution to its existing stockholders and increased fixed payment obligations, and these securities may have rights senior to those of the Company's shares of common stock. Any of these events could significantly harm the Company's business, financial condition, and prospects.

The Company's financing needs are subject to change depending on, among other things, the success of its product development efforts, the effective execution of its business model, its revenue, and its efforts to effectively manage expenses. The effects of the COVID-19 pandemic on the financial markets and broader economic uncertainties may make obtaining capital through equity or debt financings more challenging and have exacerbated the risk that such capital, if available, may not be available on terms acceptable to the Company.

CONTRACTUAL OBLIGATIONS, COMMITMENTS AND CONTINGENCIES

As of September 30, 2021, there were no material changes in the Company's commitments under contractual obligations as disclosed in its Annual Report, except that its Forward Purchase Contracts, which consist of commitments to purchase grain and seed, were \$0.1 million as of September 30, 2021, compared to \$21.2 million as of December 31, 2020, and that as of September 30, 2021, it has a remaining severance obligation to Mr. Blome, its former CEO, of \$1.9 million.

CRITICAL ACCOUNTING POLICIES

The preceding discussion and analysis of the Company's financial condition and results of operations are based upon its consolidated financial statements and the related disclosures, which have been prepared in accordance with U.S. GAAP. The preparation of these consolidated financial statements requires the Company to make estimates, assumptions, and judgments that affect the reported amounts in its consolidated financial statements and accompanying notes. The Company bases its estimates on historical experience and on various other assumptions that it believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. The Company believes the policies discussed in Note 1, Basis of Presentation and Summary of Significant Accounting Policies, are the most critical to an understanding of its financial condition and results of operations because they require it to make estimates, assumptions, and judgments about matters that are inherently uncertain.

As of September 30, 2021, there have been no significant changes to the Company's critical accounting policies disclosure reported in "Critical Accounting Estimates" in its Annual Report.

RECENTLY ISSUED ACCOUNTING PRONOUNCEMENT

In February 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standard Update (ASU) No. 2016-02, "Leases (Topic 842)" (ASU 2016-02). Under ASU 2016-02, an entity will be required to recognize assets and liabilities for the rights and obligations created by leases on the entity's balance sheet for both finance and operating leases. For leases with a term of 12 months or less, an entity can elect to not recognize lease assets and lease liabilities and expense the lease over a straight-line basis for the term of the lease. Because the Company is an emerging growth company, the requirements of the new standard are effective for annual reporting periods beginning after December 15, 2021, and interim periods within those annual periods. The Company intends to use the cumulative effect upon adoption approach when adopting the standard and continues to analyze additional potential impacts of this standard on its results of operations and financial position.

In June 2016, the FASB issued ASU No. 2016-13, "Financial Instruments – Credit Losses (Topic 326)" (ASU 2016-13). ASU 2016-13 creates accounting requirements on how to account for credit losses on most financial assets and certain other instruments. This will require the estimation of lifetime expected credit losses and corresponding recognition of allowance for losses on trade and other receivables, loans, and other instruments held at amortized cost. The ASU requires certain recurring disclosures and is effective for annual periods, and interim periods within those annual periods, beginning on or after December 15, 2023. The Company is analyzing the impact of this standard on its results of operations and financial position.

USE OF NON-GAAP FINANCIAL INFORMATION

To supplement the Company's financial results prepared in accordance with GAAP, it has prepared certain non-GAAP measures that include or exclude special items. These non-GAAP measures are not meant to be considered in isolation or as a substitute for financial information presented in accordance with GAAP and should be viewed as supplemental and in addition to financial information presented in accordance with GAAP. Investors are cautioned that there are material limitations associated with the use of non-GAAP financial measures. In addition, other companies may report similarly titled measures, but calculate them differently, which reduces their usefulness as a comparative measure. Management utilizes these non-GAAP metrics as performance measures in evaluating and making operational decisions regarding Calyxt's business.

The Company's non-GAAP financial measures reflect adjustments for certain commodity derivatives entered into in connection with its soybean product line. As a result of the continued wind-down of this product line, the Company held no commodity derivative contracts at September 30, 2021.

The Company presents adjusted gross profit and adjusted gross profit percentage, which are non-GAAP measures. Adjusted gross profit reflects adjustments necessary to present the underlying gross profit of its soybean product line, including (i) unrealized gains and losses associated with commodity derivatives entered into to hedge the change in value of fixed price grain inventories and fixed price Forward Purchase Contracts that should be recognized in the future when the underlying inventory is sold, (ii) gains and losses from commodity derivatives realized in prior periods but associated with inventory sold in the current period, (iii) net realizable value adjustments to inventories occurring in the period which otherwise would have been recognized in the future when the underlying inventory is sold, and (iv) net realizable value adjustments recognized in prior periods but associated with inventory sold in the current period. Adjusted gross profit percentage is derived from adjusted gross profit, a non-GAAP measure, and total revenue.

The Company provides in the table below a reconciliation of gross profit and gross profit percentage, which are the most directly comparable GAAP financial measures, to adjusted gross profit and adjusted gross profit percentage. The Company provides adjusted gross profit and adjusted gross profit percentage because it believes that these non-GAAP financial metrics provide investors with useful supplemental information as the amounts being adjusted affect the period-to-period comparability of gross profit and financial performance.

The table below presents a reconciliation of gross profit and gross profit percentage to adjusted gross profit and adjusted gross profit percentage:

					Nir	ne Months En	ded Sej	ptember	
	Three Months Ended September 30,					30,			
In Thousands	'	2021 2020		2021			2020		
Gross profit (GAAP measure)	\$	(519)	\$	(1,819)	\$	(2,509)	\$	(6,340)	
Gross profit percentage		(7)%		(35)%		(10)%		(64)%	
Non-GAAP adjustments:									
Commodity derivative impact, net		(2,073)		1,107		(2,520)		1,107	
Net realizable value adjustments to inventories		(88)		(555)		(160)		2,000	
Adjusted gross profit	\$	(2,680)	\$	(1,267)	\$	(5,189)	\$	(3,233)	
Adjusted gross profit percentage		(35)%		(24)%	•	(22)%	•	(33)%	

The Company presents adjusted net loss, a non-GAAP measure, and defines it as net loss including adjustments necessary to present the underlying gross profit of its soybean product line, including (i) unrealized gains and losses associated with commodity derivatives entered into to hedge the change in value of fixed price grain inventories and fixed price Forward Purchase Contracts that should be recognized in the future when the underlying inventory is sold, (ii) gains and losses from commodity derivatives realized in prior periods but associated with inventory sold in the current period, (iii) net realizable value adjustments to inventories occurring in the period which otherwise would have been recognized in the future when the underlying inventory is sold, and (iv) net realizable value adjustments recognized in prior periods but associated with inventory sold in the current period, and excluding cash-based Section 16 officer

transition expenses, restructuring costs, the recapture of non-cash stock compensation associated with the departure of Section 16 officers and restructuring-related staffing adjustments made in the third quarter of 2020, the gain upon the extinguishment of the PPP loan, and non-operating expenses, which are primarily gains and losses on foreign exchange transactions and losses on the disposals of land, buildings, and equipment.

The Company provides in the table below a reconciliation of net loss, which is the most directly comparable GAAP financial measure, to adjusted net loss. The Company provides adjusted net loss because it believes that this non-GAAP financial metric provides investors with useful supplemental information at this stage of commercialization as the amounts being adjusted affect the period-to-period comparability of net losses and financial performance.

The table below presents a reconciliation of net loss to adjusted net loss:

	Three Months Ended September 30,		Nine Months Ended		d September 30,	
In Thousands	·	2021	2020		2021	2020
Net loss (GAAP measure)	\$	(7,307)	\$ (9,476)	\$	(22,142)	\$ (31,441)
Non-GAAP adjustments:						
Commodity derivative impact, net		(2,073)	1,107		(2,520)	1,107
Net realizable value adjustments to inventories		(88)	(555)		(160)	2,000
Section 16 officer transition expenses		345	56		3,079	493
Restructuring costs		_	436		_	436
Recapture of non-cash stock compensation		_	(906)		(2,540)	(1,377)
Gain upon extinguishment of Payroll Protection Program loan		_	_		(1,528)	_
Non-operating expenses		(6)	102		(11)	121
Adjusted net loss	\$	(9,129)	\$ (9,236)	\$	(25,822)	\$ (28,661)

The Company presents adjusted net loss per share, a non-GAAP measure, and defines it as net loss per share including adjustments necessary to present the underlying gross profit of its soybean product line, including (i) unrealized gains and losses associated with commodity derivatives entered into to hedge the change in value of fixed price grain inventories and fixed price Forward Purchase Contracts that should be recognized in the future when the underlying inventory is sold, (ii) gains and losses from commodity derivatives realized in prior periods but associated with inventory sold in the current period, (iii) net realizable value adjustments to inventories occurring in the period which otherwise would have been recognized in the future when the underlying inventory is sold, and (iv) net realizable value adjustments recognized in prior periods but associated with inventory sold in the current period, and excluding cash-based Section 16 officer transition expenses, restructuring costs, the recapture of non-cash stock compensation associated with the departure of Section 16 officers and restructuring-related staffing adjustments made in the third quarter of 2020, the gain upon the extinguishment of the PPP loan, and non-operating expenses, which are primarily gains and losses on foreign exchange transactions and losses on the disposals of land, buildings, and equipment.

The Company provides in the table below a reconciliation of net loss per share, which is the most directly comparable GAAP financial measure, to adjusted net loss per share. The Company provides adjusted net loss per share because it believes that this non-GAAP financial metric provides investors with useful supplemental information at this stage of commercialization as the amounts being adjusted affect the period-to-period comparability of net losses per share and financial performance.

The table below presents a reconciliation of net loss per share to adjusted net loss per share:

	Three Months Ended September 30,		Nine Months Ended Se		ptember 30,	
		2021	2020	2021		2020
Net loss per share (GAAP measure)	\$	(0.20)	\$ (0.29)	\$ (0.60)	\$	(0.95)
Non-GAAP adjustments:						
Commodity derivative impact, net		(0.06)	0.03	(0.07)		0.03
Net realizable value adjustments to inventories		_	(0.01)	_		0.06
Section 16 officer transition expenses		0.02	0.01	0.09		0.02
Restructuring costs		_	0.01	_		0.01
Recapture of non-cash stock compensation		_	(0.03)	(0.07)		(0.04)
Gain upon extinguishment of Payroll Protection Program loan		_	_	(0.04)		_
Non-operating expenses		_	_	_		_
Adjusted net loss per share	\$	(0.24)	\$ (0.28)	\$ (0.69)	\$	(0.87)

The Company presents adjusted EBITDA, a non-GAAP measure, and defines it as net loss including adjustments necessary to present the underlying gross profit of its soybean product line, including (i) unrealized gains and losses associated with commodity derivatives entered into to hedge the change in value of fixed price grain inventories and fixed price Forward Purchase Contracts that should be recognized in the future when the underlying inventory is sold, (ii) gains and losses from commodity derivatives realized in prior periods but associated with inventory sold in the current period, (iii) net realizable value adjustments to inventories occurring in the period which otherwise would have been recognized in the future when the underlying inventory is sold, and (iv) net realizable value adjustments recognized in prior periods but associated with inventory sold in the current period, and excluding interest, net, depreciation and amortization expenses, non-cash stock compensation expenses including the recapture of non-cash stock compensation associated with the departure of Section 16 officers and restructuring-related staffing adjustments made in the third quarter of 2020, cash-based Section 16 officer transition expenses, restructuring costs, the gain upon the extinguishment of the PPP loan, and non-operating expenses, which are primarily gains and losses on foreign exchange transactions and losses on the disposals of land, buildings, and equipment.

The Company provides in the table below a reconciliation of net loss, which is the most directly comparable GAAP financial measure, to adjusted EBITDA. Because adjusted EBITDA excludes non-cash items and discrete or infrequently occurring items, the Company believes that adjusted EBITDA provides investors with useful supplemental information about the operational performance of its business and facilitates the period-to-period comparability of financial results where certain items may vary significantly independent of business performance.

The table below presents a reconciliation of net loss to adjusted EBITDA:

	Three Months Ended September 30,		Nine Months Ended Se		September 30,	
In Thousands		2021	2020		2021	2020
Net loss (GAAP measure)	\$	(7,307)	\$ (9,476)	\$	(22,142) \$	(31,441)
Non-GAAP adjustments:						
Commodity derivative impact, net		(2,073)	1,107		(2,520)	1,107
Net realizable value adjustments to inventories		(88)	(555)		(160)	2,000
Interest, net		356	324		1,059	568
Depreciation and amortization expenses		596	468		1,776	1,372
Stock-based compensation expenses		1,236	570		865	3,638
Section 16 officer transition expenses		345	56		3,079	493
Restructuring costs		_	436		_	436
Gain upon extinguishment of Payroll Protection Program loan		_	_		(1,528)	_
Non-operating expenses		(6)	102		(11)	121
Adjusted EBITDA	\$	(6,941)	\$ (6,968)	\$	(19,582) \$	(21,706)

Item 3. Quantitative and Qualitative Disclosures About Market Risk

For quantitative and qualitative disclosures about market risk that affect the Company, see "Quantitative and Qualitative Disclosures About Market Risk" in Item 7A of Part II of the Annual Report. As a result of the continued wind-down of the soybean product line, the Company's market risk related to commodity price sensitivity has been significantly reduced. As a result, the Company held no commodity derivative contracts as of September 30, 2021. There have been no other material changes in information that would have been provided in the context of Item 3 from the end of the preceding year until September 30, 2021. However, the Company does provide risk management discussion in various places in this Quarterly Report on Form 10-Q, primarily in Note 2. Financial Instruments, Fair Value, Hedging Activities, and Concentrations of Credit Risk.

Item 4. Controls and Procedures

Management's Evaluation of Disclosure Controls and Procedures

Based on an evaluation under the supervision and with the participation of management, the principal executive officer and the principal financial officer have concluded that the Company's disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, were effective as of September 30, 2021.

Changes in Internal Control over Financial Reporting

There were no changes in the Company's internal control over financial reporting that occurred during the three months ended September 30, 2021, that have materially affected, or that are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

The Company is not a party to any material pending legal proceedings as of September 30, 2021. From time-to-time, the Company may be involved in legal proceedings arising in the ordinary course of business.

Item 1A. Risk Factors

The below risk factor supplements the risk factors disclosed in Part I, Item 1A "Risk Factors" of the Company's Annual Report on Form 10-K for the year ended December 31, 2020.

The Company's operational and financial success depends on its ability to successfully implement its strategic initiative to provide synthetic biology solutions for an expanded group of end markets, which is subject to a variety of risks and uncertainties.

Since the Company's inception, it has deployed its technology platform toward delivering plant-based innovations and solutions, primarily to the agriculture end market. In October 2021, the Company announced a strategic initiative that will focus Calyxt on engineering plant-based synthetic biology solutions to meet the demand-driven needs of a diversified base of potential customers across an expanded group of end markets, including the nutraceutical, cosmeceutical, personal care, pharmaceutical, advanced materials, and chemical industries, in addition to the agriculture end market. This expanded and diversified focus will place significant demands on the Company's management, will require adaptations to the Company's operational infrastructure, and necessitate incremental capital expenditures. If the Company fails to effectively and efficiently manage and implement the strategic initiative, its business, financial condition, and results of operations would be adversely impacted. The Company would face similar adverse impacts if it is unable to differentiate Calyxt's offerings and capabilities from competitors in the synthetic biology industry, who may have competitive advantages over it, or if the Company is otherwise not successful in marketing its offerings and capabilities to new target customers.

In addition, to the extent the Company faces technological and other challenges, including unanticipated costs, in leveraging its PlantSpring platform for the development of compounds intended to be produced using the BioFactory production system, adapting its technology platform for specific customer-driven plant-based chemistry needs, or scaling production, the Company's business, financial condition and results of operations would be adversely impacted. The artificial intelligence and machine learning capabilities that Calyxt is developing for its PlantSpring platform remain in the early stages of development, and their implementation and effectiveness could be adversely affected by flawed algorithms, insufficient datasets, or errors resulting from human intervention.

Moreover, because of the novelty and complexity of the Company's PlantSpring platform and BioFactory, achieving broad commercial success may require that the Company overcomes potential customer skepticism regarding its capabilities, particularly in light of the historical challenges of scaling production in the field of synthetic biology. If the Company does not achieve the technical specifications required by its customers or successfully manage new product development processes, or if development work is not performed according to schedule, then the Company's revenue growth from new pipeline products may be prevented or delayed, and the Company's business and operating results may be harmed.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

In the nine months ended September 30, 2021, the Company did not repurchase any shares of stock or have any unregistered sales of equity securities.

Item 6. Exhibits

(a) Index of Exhibits

Exhibit	
Number	Description
3.1	Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Company's Quarterly Report on Form
	<u>10-Q filed on September 1, 2017)</u>
3.2	Amended and Restated Bylaws (incorporated by reference to Exhibit 3.2 of the Company's Quarterly Report on Form 10-Q filed with the
	SEC on May 7, 2018)
10.1	Open Market Sale Agreement Mated September 21, 2021, by and between Calyxt, Inc. and Jefferies LLC (incorporated by reference to
	Exhibit 1.1 of the Company's Current Report on Form 8-K filed with the SEC on September 21, 2021)
10.2*†	Annual Incentive Payment Criteria for Executive Officers - In Respect of Fiscal Year 2021
10.3†	Calyxt, Inc. 2021 Employee Inducement Incentive Plan (incorporated by reference to Exhibit 10.2 of the Company's Current Report on
	Form 8-K filed with the SEC on July 15, 2021)
10.4†	Form of Performance Stock Unit Agreement under the Calyxt, Inc. 2021 Employee Inducement Incentive Plan (incorporated by reference
	to Exhibit 10.3 of the Company's Current Report on Form 8-K filed with the SEC on July 15, 2021)
10.5†	Participation Agreement of Mr. Michael A. Carr under the 2021 Executive Severance Plan (incorporated by reference to Exhibit 10.6 of
	the Company's Current Report on Form 8-K filed with the SEC on July 15, 2021)
10.6†	Calyxt, Inc. Form of Non-Competition, Non-Solicitation, Confidentiality and Inventions Agreement (incorporated by reference to Exhibit
	10.7 of the Company's Current Report on Form 8-K filed with the SEC on July 15, 2021)
31.1*	Certification of the Chief Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) of the Exchange Act
31.2*	Certification of the Chief Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) of the Exchange Act
32*	Certification of the Chief Executive Officer and Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted Pursuant to
	Section 906 of the Sarbanes-Oxley Act of 2002
101.INS*	Inline XBRL Instance Document
101.SCH*	Inline XBRL Taxonomy Extension Schema Document
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104*	The cover page for the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2021, has been formatted in
	Inline IXBRL

^{*}Filed herewith

 $[\]dagger$ Indicates management contract or compensatory plan.

SIGNATURE

Pursuant to the requirements of the Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on November 4, 2021.

CALYXT, INC.

By: /s/ Michael A. Carr

Name: Michael A. Carr

Title: President and Chief Executive Officer

(Principal Executive Officer)

By: /s/ William F. Koschak

Name: William F. Koschak

Title: Chief Financial Officer

(Principal Financial and Accounting Officer)

Annual Incentive Payment Criteria – In Respect of Fiscal Year 2021 Company Objectives – Revised September 2021

Bonus at target (100%) level of achievement of Company Objectives and Individual Objectives is a percentage of base salary to be determined by the Compensation Committee of the Board of Directors (the "Committee"). The maximum bonus that may be earned will not exceed 1.5x target level bonus, even if actual performance exceeds the maximum level for any or all performance goals. A participant in the 2021 annual bonus program must be employed by Calyxt as of December 31, 2021 and as of the payment date in order to receive any bonus under the 2021 annual bonus program unless otherwise provided in a written agreement between Calyxt and the participant. Additionally, all bonuses are subject to "clawback" to the extent required or permitted by law.

Company Objectives

Portion of bonus attributable to Company Objectives is weighted as follows: 40% Innovation (Measure 1), 20% Cash Balance (Measure 2) and 40% Collaboration (Measure 3). Each Measure 1-3 will be determined by the Committee. Each Measure 1-3 of the "2021 Company Objectives" must achieve at least 50% level for any bonus amount to be earned under Company Objectives.

With respect to the Company Objectives, the Compensation Committee shall have the authority to determine whether (and by what amount) the actual result used to calculate the achievement of a Measure of the "2021 Company Objectives" and the "Fourth Quarter Addendum" should be adjusted to account for extraordinary events or circumstances (including, without limitation, overall financial market performance factors relative to assumptions used in establishing target Measures), or should otherwise be adjusted in order to be consistent with the purpose or intent of the 2021 annual performance bonus program. The "Fourth Quarter Addendum" is intended to be additive to the calculation but shall not change the target level of achievement for the Company Objectives for the year, which collectively remains at 100%.

2021 Company Objectives

Multiplier/ Achievement Level	Measure 1 Innovation	Measure 2 Cash Balance	Measure 3 Collaboration
50%	[R&D Measure]	[Minimum Cash Balance Measure]	[Collaboration Measure]
100%	[R&D Measure]	[Minimum Cash Balance Measure]	[Collaboration Measure]
150%	[R&D Measure]	[Minimum Cash Balance Measure]	[Collaboration Measure]
Weighting of Company Objectives	40%	20%	40%

Fourth Quarter Addendum

Multiplier/ Achievement Level	Measure 1 Collaboration	Measure 2 Cash Balance	Measure 3 Innovation
50%	[Collaboration Measure]	[Minimum Cash Balance Measure]	[Innovation Measure]
100%	[Collaboration Measure]	[Minimum Cash Balance Measure]	[Innovation Measure]
150%	[Collaboration Measure]	[Minimum Cash Balance Measure]	[Innovation Measure]
Weighting of Company Objectives	40%	20%	40%

Individual Objectives

The Compensation Committee will determine, in its discretion, the level of achievement of the goals identified below and the overall achievement of the Individual Objectives, with a multiplier of 0.7x at a minimum level of achievement, 1x at a target level of achievement and 1.5x at a maximum level of achievement. Achievement at less than the minimum level determined by the Compensation Committee will result in no bonus being earned for that particular goal or for the Individual Objectives as determined by the Compensation Committee.

Specific individual measures will be determined by the Committee drawn from the categories identified below, together with individual weighting of such Individual Objectives.

Individual Measures			
П	Internal & External Communications Achievement / Advancement		
	Financial Reporting Achievement / Advancement		
Ī	Information Technology Achievement / Advancement		
	Research and Development Achievement / Advancement		
	Safety & Compliance Achievement / Advancement		
Ī	Leadership Achievement / Advancement		
	Risk Management Achievement / Advancement		
Ī	Intellectual Property Achievement / Advancement		

CERTIFICATION PURSUANT TO RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT, AS AMENDED

I, Michael A. Carr, certify that:

- 1. I have reviewed this Quarterly Report on Form 10-Q of Calyxt, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 3. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and I 5d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 4. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 4, 2021	
/s/ Michael A. Carr	
Michael A. Carr	
President and Chief Executive Officer	

CERTIFICATION PURSUANT TO RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT, AS AMENDED

I, William F. Koschak, certify that:

- 1. I have reviewed this Quarterly Report on Form 10-Q of Calyxt, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 3. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and I 5d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 4. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 4, 2021	
s/ William F. Koschak	
Villiam F. Koschak	
Chief Financial Officer	

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Calyxt, Inc. (the "Company") on Form 10-Q for the period ended September 30, 2021, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned hereby certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to his knowledge:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 4, 2021
/s/ Michael A. Carr
Michael A. Carr
President and Chief Executive Officer
/s/ William F. Koschak
William F. Koschak
Chief Financial Officer